

Available online at www.sciencedirect.com**SciVerse ScienceDirect**

Procedia Economics and Finance 3 (2012) 426 – 431

Procedia

Economics and Finance

www.elsevier.com/locate/procedia

Emerging Markets Queries in Finance and Business

Financial crisis, regulation and competition: the Romanian banking experience

Claudia Gabriela Baicu^{a,*}^a*Spiru Haret University, Faculty of Marketing and International Economic Affairs, Str. Fabricii no. 46G, Sector 6, Bucharest, Romania*

Abstract

By the early 1970s, competition in the banking system was limited. Reduced competition in the banking system was due to regulations adopted by many countries after the financial crisis of the 1930s. At that time, authorities believed that the high risks which banks have assumed, in a fierce competition context, led to destabilization of the financial system. After the 1980s, deregulation, financial liberalization and technological change were important factors that have led to increased competition in the banking sector. Therefore, an important issue for regulators and supervisors is the relationship between competition in the banking system and financial stability. The specialty literature, both theoretical and empirical, has not reached a consensus on the effects of competition on financial stability. This problem became more acute under the global financial crisis. Against this background, the paper analyses the role of competition in the Romanian banking system in the context of the global crisis. The paper is structured as follows: the first section reviews the arguments supporting that increased competition in banking system leads to improved financial stability; the counterarguments are mentioned later. The role of regulations in managing the competition in banking system is also emphasised. The last section analyzes developments on competition and stability in the Romanian banking system.

© 2012 The Authors. Published by Elsevier Ltd. Open access under [CC BY-NC-ND license](https://creativecommons.org/licenses/by-nc-nd/4.0/).

Selection and peer review under responsibility of Emerging Markets Queries in Finance and Business local organization.

Keywords: regulation, competition, crisis, Romanian banking system

1. Introduction

Over time an important issue for regulators and supervisors was the relationship between competition in the banking system and financial stability. The specialty literature has not reached a consensus on the effects of

* Corresponding author. Tel.: +4-072-331-7158.

E-mail address: baicuclaudia@yahoo.com.

competition on financial stability. The Great Depression of the 1929-1933s led to adoption of regulations aimed to decrease competition in banking system. Gradually, competition in banking system was allowed. The old regulations were removed and other instruments to manage excessive risk taking were introduced.

After 1990 the Romanian banking system was restructured and legislation was aligned with the European Union (UE) requirements. In the early stages the level of concentration in the banking system was quite high, but at present it is lower. Foreign banks that have invested in Romania contributed to increased efficiency and competition. But the global financial crisis revealed that foreign banks could be an indirect channel of crisis propagation.

2. Regulations and competition in banking sector

After a period in which the banking systems of different countries have been protected from both internal and external competition, the first signs of change appeared in the early 1970s. The restricted competition that characterized the banking system until the early 1970s was a result of regulations adopted by many countries of the world after the Great Depression of the 1929-1933s. In that period, it was considered that the financial system was destabilized because of the high risks assumed by banks, in a fierce competition environment. In this respect, Padoa-Schioppa, 2001 mentioned that the banking regulations adopted after the Great Depression based on the idea that competition must be diminished.

Gradually, the authorities' attitude towards competition in the banking system has changed. Deregulation, financial liberalization and technological developments had a strong influence on changing the framework in which banks operate, being important forces that increased competition in the banking sector. Currently, even if there are different views on the relationship between competition and banking stability, generally, competition in the banking system is seen as a way of increasing efficiency.

The old regulations that governed banking activity were removed and new competition rules were introduced. The potential negative impact of competition in banking was checked with prudential regulation like capital requirements Vo, 2010. The introduction of disclosure requirements for banks in order to improve transparency and market discipline was another measure to check the risk taking Vives, 2010. Allen et al. 2001 highlight that modern banking regulation was based on: prudential supervision, deposit insurance and rules for competition among banks. The global crisis revealed a lot of issue regarding the regulatory framework of banking and financial activity. Llewellyn, 2010 noted that a common feature of banking crises is that they followed after a period of deregulation and increased competition.

Vives, 2010 underlines that the lender of last resort, deposit insurance schemas, and „too big to fail” concept introduced distortions and exacerbate excessive risk taking. Therefore, the author proposes close collaboration between the regulator and the competition authority in order to avoid competition distortions. The same idea is also emphasized by OECD, 2010, which mentions that the measures taken during the global crisis to restore financial stability (state aid, bailouts, capital injection etc.) could have potential negative impact on competition in financial sector. Consequently, “a deep rethinking of the interaction between competition and financial stability authorities” is proposed (pp. 10).

There is no consensus regarding the role of banking competition on financial stability in the specialty literature. As already noted the traditional approach argues that tougher competition leads to financial stability deterioration. On the contrary, recent studies argue the positive role of competition on financial stability. An excellent review of the theoretical literature that supports both the negative role and the positive role of competition on financial stability is achieved by Beck et al., 2010, pp. 17-19.

The main arguments highlighted by authors in supporting the idea that competition could affect stability are: competition for depositors leads to excessive risk taking, which implies negative repercussions for financial stability; competition could reduce stability through interbank market and payment system; a more concentrated banking system, with a few banks, is easier to monitor.

On the other hand, in order to argue the idea that competition has a positive effect on stability, Beck et al. 2010 refer to Boyd and De Nicoló, 2005, who take into consideration the borrower's behavior. They mention

that a concentrated banking system leads to increased instability because banks, being less numerous, could increase the interest rate charged on loans they grant. In these circumstances, borrowers could take greater risks, which may increase bad loans.

Beck et al., 2010 mention also other views: the banks in concentrated banking systems are less numerous, but larger, which means they are more complex and therefore harder to monitor. In addition, the authors stress the fact that the concepts "too big" or "too important to fail" in a more concentrated banking system could have negative repercussions on financial stability. As noted by Mishkin, 1999, financial consolidation leads to larger institutions that could lead to increased systemic risk.

The study of Turk Ariss, 2010 investigates the impact of market power in banking in the context of developing countries. The results empirically support the theory that increased competition could affect bank stability. The market power in the banking industry is also analysed by Maudos and De Guevara, 2007, who investigate what kind of relationship exists between market power in the loan and deposit markets and efficiency. The study refers to the EU-15 countries, period 1993-2002. In another empirical study, Delis and Tsionas, 2009 found a negative relationship between efficiency and market power.

The study used EMU bank data. Koutsomanoli-Filippaki et al., 2009 investigate the link between competition and concentration on the one hand and bank efficiency on the other hand. The analyses were carried out in 10 Central and Eastern European countries spanning the years 1998-2003.

Academic literature measures competition in banking sector using several methods. An initial indicator of the competition level is market concentration, which could be measured as market shares, the number of banks or the Herfindahl-Hirschman index (HHI). Besides these structural measures other factors such the existence of entry barriers, activities restrictions or presence of foreign ownership need to be considered. Evaluating competition in financial markets requires also analyze of other factors like: switching costs, geographic constraints, size of competitors, and size of customers. Competition from non financial firms is an indicator too OECD, 2010.

3. Competition, concentration and stability in the Romanian banking system

The Romanian financial system is dominated by credit institutions. After 1990, the Romanian banking system has undergone a profound restructuring process that started with changing the legal framework and implementing the two-tier banking system (central bank, the National Bank of Romania – NBR and commercial banks). Subsequently, regulations have been adapted in line with international standards and the EU requirements. Romanian banking regulations are structured on the universal banks characteristics, allowing banks to carry out the full range of financial products and services. Banking regulations do not impose barriers to entry into the system; institutions must comply with criteria for capital and other conditions of approval. Also there are no geographical restrictions on area where banks can operate.

Romanian banking sector has developed rapidly both quantitatively and qualitatively. The number of banks increased from 12, in 1990, to 45 in 1998, NBR, *Annual Report*, various issues. The programme launched by the NBR in 1999 was an important step in restructuring of the Romanian banking system.

This programme was needed because of the high level of non-performing loans, which, at end-1998, accounted for more than 58 percent of total credit portfolio. In this context, the aim of the restructuring programme was finding solutions for "problem-banks" and reforming the regulatory and prudential supervisory framework of banking activity NBR, *Financial Stability Report 2006*, pp. 49. In the subsequent years, as a result of the restructuring programme and the consolidation process, the number of banks decreased. Therefore, at end-2011 H1, number of credit institutions reached 42 *Financial Stability Report 2011*, pp. 21.

Although the number of banks operating in the Romanian banking system grew rapidly, for a long time, the concentration was maintained at high levels (table 1).

Table 1. Leading banks' portfolios*, 1991 – 1998

	1991	1992	1993	1994	1995	1996	1997	1998
Share in total assets	83	76	76	69	64	66	61	62
Share in total credits	94	93	87	82	76	76	63	71
Share in total deposits	68	60	61	61	56	62	61	59
Share in total own funds	85	73	70	63	62	71	72	49

* Four leading banks (Bancorex, Banca Comerciala Romana, Banca Romana pentru Dezvoltare, Banca Agricola)

Source: NBR, *Annual Report 1998*, pp. 77.

However, gradually, the downward trend of the concentration of the Romanian banking system began to take shape. For example, in 1999-2006, the share of top-five banks in total bank assets fell from 66.7% December 1999 to 57.8% March 2006 NBR, *Financial Stability Report 2006*, pp. 50.

Although with small oscillations, compared to the previous periods, the assets share of top five banks continued to decrease in the context of the global financial crisis. At end-2011 H1, the top five banks in terms of assets size held 53.6 percent of total bank assets compared to 56.3 percent in 2007; 54.3 percent in 2008; 52.4 percent in 2009 and 52.7 percent in 2010 - NBR, *Financial Stability Report 2011*, pp. 21.

As regards other indicators, at end-2011, the top five banks in terms of assets size held 52.3 percent of loans, 58.0 percent of deposits and 52.8 percent of equity capital NBR, *Annual Report 2011*, pp. 77. According to the NBR data *Financial Stability Report 2011*, pp 23-24, although in 2010 the concentration degree of the Romanian banking system assets increased slightly, it is still below the EU average (EU27). The value of Herfindahl-Hirschmann index shows a higher degree of concentration in assets and deposits than in loans. In June 2011, the value of Herfindahl-Hirschmann index for assets was 895 points compared to the EU average of 1,102.

As legislation in other countries in region, the Romanian legislation has allowed foreign banks to invest in the banking system. In the first stage of transition, foreign investors were not interested to invest in the Romanian banking system. The restructuring programme launched by the NBR in 1999 created conditions for privatization of state-owned banks. During 1999-2000, the Romanian banking system experienced profound changes: privatization of Banca Romana pentru Dezvoltare and BancPost, restructuring of Bancorex and Banca Agricola. Therefore, at end-2000 foreign-owned banks held 50.88 percent of the domestic market NBR, *Annual Report 2000*, pp. 99. The privatization process continued with privatization of Banca Agricola in 2001, which was taken over by Raiffeisenbank. In 2006, the privatization of the leading Romanian bank – Banca Comerciala Romana – was completed, through its takeover by the Austria-based Erste Bank. With financial globalization and profound change that occurred in Romania since 1990, currently the foreign banks hold the overwhelming share of banking capital and aggregate assets (in 2011 H1, banks with foreign capital held 85.4% of total assets). In 2010, banks with Austrian capital had the largest market share in aggregate assets, being followed by banks with Greek capital NBR, *Financial Stability Report 2011*, pp. 21.

It is widely recognized that, until the triggering of the crisis, foreign banks involved in Romania had a positive role on increasing competition and efficiency in the banking system. But one of the main concerns related to the important presence of foreign banks in a given country is the possibility of rapid withdrawal from that country, which could affect financial stability and hence the real economy. However, foreign banks did not manifest such a generalized behavior in Romania, until the triggering of the crisis (even if there were some episodes of crisis, such as the crisis of banks with Turkish capital, which was caused by the Turkish banking system crisis).

With the sub-prime mortgage crisis in the U.S., there is concern that foreign banks operating in Romania

could be an indirect channel of propagation of the crisis, with negative effects on financial stability. This fear is based on the business model developed by foreign banks present in Romania in the pre-crisis period see Baicu and State, 2012. Intense competition has led to an aggressive lending activity, and much of this growth was based on external resources from parent banks at end 2007, these resources represented about 70 percent of total interbank resources used by credit institutions in Romania - NBR *Financial Stability Report 2008*, pp. 40. This practice led to increase of domestic credit in foreign currency, which increased the currency risk and Romania's foreign debt.

Against this background, liquidity problems that occurred at the beginning of the global crisis were propagated in Romania too, even if the Romanian banks did not contain in their balance sheets "toxic assets". An important reason was the liquidity problem encountered by parent banks of the Romanian subsidiaries in their countries. Reducing liquidity meant reducing domestic credit, which affected the real economy. Despite the efforts of foreign bank subsidiaries to improve their business model and attract more internal resources, external financing remains a potential source of instability in June 2011, foreign liabilities accounted for 27.2 percent of total liabilities – NBR, *Financial Stability Report 2011*, pp. 26-27. In order to prevent the reducing of foreign banks' exposure to Romania, in 2009 an agreement was signed at Vienna between NBR and parent institutions of the nine largest foreign-owned credit institutions incorporated in Romania.

The disastrous effects of the global financial crisis have imposed reconsideration of the regulatory framework for banking. Internationally, the starting point for banking reform was the revision of Basel II and adoption of new measures to better capture the correlation between risk and capital (Basel III framework). The measures aimed to strengthen prudential regulation and supervision of banking constituted a priority for Romania too. They have been materialized in transposition in national legislation of Basel III.

4. Conclusions

Due to there specificity, for a long period of time banks were protected from competition, both from inside of banking system, as well as from outside of the banking system. However, deregulation and financial liberalization allow competition in banking system. More and more, the strict regulations that governed banking were replaced by other prudential instruments, considered more appropriate for the new operating environment Basel Accords.

Beginning with 1990, the Romanian banking system has undergone a complex process of restructuring and integration with the developed European systems. After a long time when the level of concentration in the banking system was quite high, currently the concentration degree of the banking system assets is lower.

Competition in the Romanian banking system is due to the massive presence of foreign banks. Foreign banks have played an important role in increasing efficiency and competition but in the context of the global financial crisis could be an indirect channel of crisis propagation, and thus, a channel of increase of the Romania vulnerability. The business model developed by the subsidiaries of foreign banks in the pre-crisis period led to increase of foreign liabilities, external debt and foreign currency loans, which increased the vulnerability of Romania. The high level of involvement of banks with Greek capital could be another concern for the Romanian banking system.

Solving this situation involves improving the business model practiced by foreign banks present in Romania and strengthening the regulation and prudential supervision of banks, according to the new international standards which emerged as a result of the global financial crisis.

Acknowledgements

This work was supported by the project "Post-Doctoral Studies in Economics: training program for elite researchers - SPODE" co-funded from the European Social Fund through the Development of Human Resources Operational Programme 2007-2013, contract no. POSDRU/89/1.5/S/61755.

References

- Allen, F., Gersbach, H., Krahnen, J-P., Santomero, A. 2001. Competition Among Banks: Introduction and Conference Overview, *European Finance Review* 5, pp. 1-11.
- Baicu, C.G., State, O., 2012. Banking models under the impact of the post-crisis organizational changes apt to confer sustainable financial stability - Romanian experience, *Amfiteatru Economic Journal*, Volume XIV, No. 32, pp. 436-450.
- Basel Committee on Banking Supervision, 2010. Basel III: A global regulatory framework for more resilient banks and banking systems.
- Basel Committee on Banking Supervision, 2010a. Basel III: International framework for liquidity risk measurement standards and monitoring.
- Beck, T., Coyle, D., Dewatripont, M., Freixas, X., Seabright, P, 2010. Bailing out the Banks: Reconciling Stability and Competition, Centre for Economic Policy Research.
- Boyd, J.H., De Nicoló, G., 2005. The theory of bank-risk taking and competition revisited, *Journal of Finance* 60, pp. 1329-1343.
- Busch, A., 2009. *Banking Regulation and Globalization*. Oxford University Press, New York.
- Delis M., Tsionas E. M., 2009. The joint estimation of bank-level market power and efficiency, *Journal of Banking & Finance* vol. 33, issue 10, pp. 1842–1850.
- Koutsomanoli-Filippaki A., Margaritis D., Staikouras C., 2009. Efficiency and productivity growth in the banking industry of Central and Eastern Europe, *Journal of Banking & Finance* vol. 33, issue 3, pp. 557–567.
- Llewellyn, D., 2010. The global banking crisis and the post-crisis banking and regulatory scenario, University of Amsterdam, Research Papers in Corporate Finance.
- Maudos, J., De Guevara, J. F., 2007. The cost of market power in banking: Social welfare loss vs. cost inefficiency, *Journal of Banking & Finance*, vol. 31, pp. 2103–2125.
- McCauley, R., McGuire, P. and von Peter, G., 2010. The architecture of global banking: from international to multinational?, *BIS Quarterly Review*, part 3, pp 25-37.
- Mishkin, F.S., 1999. Financial consolidation: Dangers and opportunities, *Journal of Banking and Finance* 23, pp. 675-691.
- OECD, 2010. Policy Roundtables *Competition, Concentration and Stability in the Banking Sector*.
- Padoa-Schioppa, T., 2001. Bank Competition: A Changing Paradigm, *European Finance Review* 5, pp. 13-20.
- NBR: *Financial Stability Report*, National Bank of Romania, various issues.
- NBR: *Annual Reports*, National Bank of Romania, various issues.
- Turk Ariss, R., 2010. On the implications of market power in banking: Evidence from developing countries, *Journal of Banking and Finance* 34 (4), pp. 765-775.
- Vives, X., 2010. Competition and stability in banking, CEPR Policy Insight no. 50.
- Vo, T. Q. A., 2010. Banking competition, monitoring incentives and financial stability, Working paper 2010/16, Norges Bank.